

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Engineering Division
Honolulu, Hawaii 96813

May 13, 2011

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

**APPLICATION FOR A DLNR DAM SAFETY CONSTRUCTION/ALTERATION PERMIT
PERMIT NO. 44 – UPPER KAPAHI RESERVOIR (KA-0013)
DAM REMEDIATION, KAPAA, KAUAI, HAWAII**

The Engineering Division hereby submits an application for your approval and authorization for the Chairperson and Department to stipulate conditions and issue a Dam Safety Construction/Alteration Permit for the subject application, "Remediation of the UPPER KAPAHI RESERVOIR", pursuant to Chapter 179D Hawaii Revised Statutes.

APPLICANT:

Mr. Ernest Y.W. Lau
Public Works Administrator
State of Hawaii
Department of Accounting and General Services
1151 Punchbowl Street, Room 426
Honolulu, HI 96813

CO-LANDOWNER:

Russell Y. Tsuji, Administrator
State of Hawaii
Department of Land and Natural Resources
Land Division
1151 Punchbowl Street, Room 220
Honolulu, HI 96813
TMK: (4) 4-6-007:011

CO-LANDOWNER:

Larry Dill, Chief Engineer
County of Kauai
4444 Rice Street, #275
Lihue, Hawaii 96766
TMK: (4) 4-6-007:011

CO-LANDOWNER:

Bernadine Martins
6651 Kawaihau Road
Kapaa, Hawaii 96746
TMK: (4) 4-6-007:052

CO-LANDOWNER:

Erika and Christopher Martins
P.O. Box 40
Kapaa, Hawaii 96746
TMK: (4) 4-6-007:029

SUMMARY OF REQUEST:

Application for a Dam Safety Construction/Alteration Permit for the remediation of the Upper Kapahi Reservoir, Kapaa, Hawaii, See Exhibit 1.

LOCATION: Kapaa, Kauai, Hawaii, TMK: (4) 4-6-007:011, 052, 029. See Exhibit 2.

BACKGROUND:

The Upper Kapahi Reservoir was constructed around 1910 by Lihue Plantation to supply irrigation water to nearby sugarcane fields. The reservoir is currently used to supply irrigation water downstream and managed by the East Kauai Water Users Cooperative, lessee from the State of Hawaii.

The Upper Kapahi Reservoir Dam is approximately 40 ft. high, 1,080 ft. long. The dam crest is about 19-ft wide and the County of Kauai's Kainahola Road runs on top of the dam crest. The surface area of the reservoir at the dam crest is approximately 6.7 acres. The reservoir impounds a maximum of 310 ac-ft. The existing outlet works consist of a slide gate that leads to a 184-ft long discharge tunnel through the foundation of the dam. Gate control is via an operator accessed on the catwalk structure. The gate and catwalk are scheduled for repair in the near future under a separate project by the Department of Agriculture. The dam has a size classification of "small" and hazard potential classification of "high".

A 2009 Phase I Visual Inspection Report by Kleinfelder West, Inc. identified that the dam has a history of poor maintenance including excessive vegetation, oversteepened slopes, sediment and debris in the reservoir, and embankment erosion.

An application for the remediation of the Upper Kapahi Reservoir was filed on July 22, 2010 by the State of Hawaii, Department of Accounting and General Services (DAGS), on behalf of the co-owners, State of Hawaii, Department of Land and Natural Resources (DLNR), the County of Kauai, Bernadine Martins Trust, and Erika and Christopher Martins.

PROJECT DESCRIPTION:

The owner is proposing to remediate the entire dam structure. The project will include clearing of all the vegetation, stabilizing portions of the upstream slope, adding a rock slope protection, widening the crest, and extending and stabilizing the downstream embankment. For the spillway a new 46-ft long, six-barrel 6-ft x 6-ft a concrete box culvert is being installed to pass the appropriate design flood and ensure adequate freeboard. Construction of the spillway will require alteration to Kainahola Road and a bypass will be built to allow traffic flow during construction. There will also be a new staff gage and survey monuments installed. See Exhibit 3.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

In accordance with the Division of Land Management's Environmental Impact Statement Exemption List, approved by the Environmental Council dated April 28, 1986, the subject request is considered exempt from the preparation of an environmental assessment pursuant to Exemption Class No. 1 that states: "Operations, repairs or maintenance of existing structures, facilities, equipment or topographical features, involving negligible or no expansion or change of use beyond that previously existing." See Exhibit 4.

REMARKS:

The applicant (DAGS) and their client, DLNR and the applicant's consultant, GEI Consultants, Inc., have completed a basis of design, plans and specifications and requests for the approval of a dam safety construction/alteration permit. The Department and its engineering consultant, Kleinfelder, Inc. have reviewed the documents and concluded that it is sufficient for its intended purposes, (see Exhibit 5). Staff recommends approval of this permit application with the Dam Safety Permit General Conditions (see Exhibit 6) and condition specified under the Special Conditions.

SPECIAL CONDITIONS:

1. DLNR Dam Safety Construction/Alteration Permit No. 44 shall be constructed in coordination and conjunction with DLNR Dam Safety Construction/Alteration Permit No. 42, Upper Kapahi Reservoir – Gate and Catwalk Repair. The construction completion and approval of either permit may be contingent on the other.
2. Provide adequate evidence that revisions to the original construction drawings and specifications that were submitted and approved by DLNR and reviewed by their consultant, Kleinfelder West, Inc. have been incorporated into the construction work (such as in the form of approved change orders or shop drawings).

RECOMMENDATION:

That the Board:

1. Authorize the approval and issuance of the Dam Safety Construction/Alteration Permit for this project; and
2. Direct the Chairperson to issue a dam safety permit for the remediation of the Upper Kapahi Reservoir (DLNR Dam Safety Construction/Alteration Permit No. 44) subject to such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.
3. Authorize the Department to oversee the permitted work and take appropriate action including but not limited to selecting and procuring testing or professional services to verify construction work, approval of minor revisions and changes, issuance of fines and /or revocation of the permit, if necessary.

Respectfully submitted,



CARTY S. CHANG
Chief Engineer

APPROVED FOR SUBMITTAL:



WILLIAM J. AILA, JR.
Chairperson

- Exhibit(s):
- 1 Owner Permit Application
 - 2 Location map
 - 3 Partial Construction Drawing set
 - 4 DAGS Right-of-Entry, including Environmental assessment exemption justification (Chapter 343 HRS)
 - 5 Kleinfelder, Inc. correspondence on approval of plans (to be provided at Board meeting)
 - 6 Dam Safety Permit General Conditions

State of Hawaii
BOARD OF LAND AND NATURAL RESOURCES
 Department of Land and Natural Resources
 Engineering Division

**APPLICATION FOR APPROVAL OF PLANS AND SPECIFICATIONS FOR CONSTRUCTION,
 ENLARGEMENT, REPAIR, ALTERATION, OR REMOVAL OF A DAM**

Date of Application: July 12th, 2010

Applicant:

Contact Name: Ernest Y. W. Lau

Department of Accounting &

Firm / Company: General Services (DAGS), State of Hawaii

Mailing Address 1151 Punchbowl Street, Room 426, Honolulu, HI 96813

Telephone: 808-586-0526

Fax: 808-586-0521

Email: ernest.y.lau@hawaii.gov

The Applicant hereby applies to the Board of Land and Natural Resources for the approval of the attached plans and specification for the Upper Kapahi Dam Safety Improvements (construction, etc.) in accordance with Chapter 179D HRS (as amended by Act 262, SLH 2006), and subject to the provisions, conditions, and limitations of the current Hawaii Administrative Rules and various DLNR dam safety guidelines.

Accompanying this application are:

(please check)

	Waived
1. Filing fee (\$25.00) (Waived for government agencies)	
2. Three (3) copies of the Detailed Cost Estimate	<input checked="" type="checkbox"/>
3. Three (3) copies of the Final Design Report	<input checked="" type="checkbox"/>
4. Three (3) copies of the Plans	<input checked="" type="checkbox"/>
5. Three (3) copies of the Specifications	<input checked="" type="checkbox"/>
6. Proposed Construction Schedule	<input checked="" type="checkbox"/>
7. Supporting documents:	<input checked="" type="checkbox"/>
<u>Three (3) copies of the Emergency Action Plan for Construction</u>	<input checked="" type="checkbox"/>
<u>Three (3) copies of the letters of exemption</u>	<input checked="" type="checkbox"/>

NAME OF STRUCTURE: Upper Kapahi Dam

DAM OR RESERVOIR LOCATION: Kapa'a, Kaua'i County, two miles north west of Kapa'a

Island: Kaua'i

Tax Map Key: (4) 4-6-007:011

Attach USGS topographic map (scale 1" = 2000') and property tax map (showing location access to site, proposed work)

State Land Use District: ☒ Agriculture ☐ Urban ☐ Rural ☐ Conservation

BRIEF DESCRIPTION OF WORK TO BE PERFORMED

Install new box culvert spillway to satisfy PMF discharge requirements, up and downstream stability/embankment improvements to satisfy factor of safety, upstream erosion control improvements.

Exhibit 1

11 APR 03 PM 07:30 ENGINEERING

TECHNICAL INFORMATION:**DLNR-Dam Safety-Sheet 2**

1. Drainage Area 0.186 sq. miles or 119 acres
2. Classification of Dam Dam size: SMALL, Hazard Classification: HIGH
3. Type of Structure Earthen embankment
4. Elevation-Area-Capacity Data:

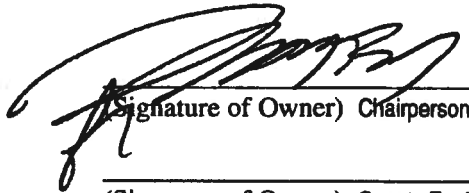
	Elevation	Surface Area (acres)	Total Storage Volume (acre-feet)
Natural Streambed	~320'	N/A	N/A
Primary Spillway	~364'	N/A	N/A
Secondary Spillway	N/A	N/A	N/A
Top of Dam	~366.5'	N/A	N/A
Design Water Level	~363.5'	~6.3	272
Invert of Drain	~323'	N/A	N/A
5. Spillway Details (Type, Dimensions, Material)
Primary: Existing grass lined, earth channel
Secondary: None
6. Purpose of Structure Agricultural water supply.
(water supply, irrigation, recreation, real estate development, etc.)
7. Attach rainfall and stream flow records, and flood-flow records and estimates (as accurately as may be readily obtained) See section 2.2 of Design Memorandum - Pertinent Data, Table 2.1: Median annual rainfall is 60-80 inches.

ADDITIONAL INFORMATION

1. Primary Owner Contact (if different from applicant) Morris Atta, Acting Administrator
Owner Company or Entity: DLNR - Land Division
Mailing Address 1151 Punchbowl St. Room 220, Honolulu, HI 96813
Telephone: 808-587-0422 Fax: 808-587-0455 Email: dlnr.land@hawaii.gov
2. Registered Hawaii Professional Engineer who prepared the plan GEI Consultants, Inc.
Steve Verigin
Mailing Address 10860 Gold Center Drive, Suite 350, Rancho Cordova, CA 95670
Registration No. 13646-CE
Telephone: 916-631-4574 Fax: 916-631-4501 Email: sverigin@geiconsultants.com
3. Registered Professional Engineer to be responsible for inspection during construction _____
Steve Verigin, GEI Consultants Inc.
4. Contractor (If known) Unknown at this time
Mailing Address _____
Telephone: _____ Fax: _____ Email: _____
5. List all other permits applications submitted to other governmental agencies:
Pending submittal by Contractor: Kaua'i County Road Permit, DOH - Community Noise Permit
NPDES (Form C & G). Submitted: 404 to USACE (AG exemption), SCAP (not required).
6. Anticipated effect of proposed structure on natural environment: Minor increased footprint
of project embankment on downstream side of dam and box culvert under county roadway.

Exhibit 1

1. List all other parties that have ownership or other interest on the parcels where the dam and reservoir are located and identify their interest in the property. The Owners herein listed below concur with the work proposed within this application by the applicant and by his/her signing hereto, the owner of the land extends to the Board of Land and Natural Resources, and its designated representatives, a right-of-entry onto the project site to conduct any investigations or inspections required in compliance with the provisions of Chapter 13-190, Hawaii Administrative Rules. (Submit additional copies of this sheet should there be more owners)



(Signature of Owner) Chairperson

1151 Punchbowl St., #220; Honolulu, HI 96813; Owner
(Address / Interest in Dam or Reservoir)

(Signature of Owner) County Engineer

4444 Rice St., #275; Lihue, HI 96766; Owner
(Address / Interest in Dam or Reservoir)

(Signature of Owner) Bernadine Martins

6651 Kawaihau Rd., Kapaa, HI 96746; TMK: (4) 4-6-007:052
(Address / Interest in Dam or Reservoir)

(Signature of Owner) Erika Martins

P. O. Box 40; Kapaa, HI 96746; TMK: (4) 4-6-007:029
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(Address / Interest in Dam or Reservoir)

I, Ernest Y. W. Lau the applicant, hereby certify that the information herein is true and factual to the best of my knowledge. Signing below indicates that the applicant understands that, if the permit requested is granted by the Board of Land and Natural Resources, the proposed work is to be initiated and completed within two (2) years of the approval date, unless specifically permitted in the approved permit terms and conditions.

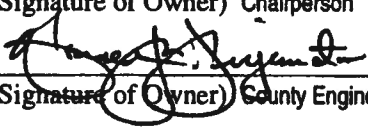


(Signature of Applicant & Title)

Public Works Administrator;
Dept. of Accounting and General Services (DAGS)

Date: 3/1/11

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 (Signature of Owner) County Engineer	<u>4444 Rice St., #275; Lihue, HI 96766; Owner</u> (Address / Interest in Dam or Reservoir)
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_____ (Signature of Owner) Erika Martins	<u>P. O. Box 40; Kapaa, HI 96746; TMK: (4) 4-6-007:029</u> (Address / Interest in Dam or Reservoir)
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<u>Bernadine K. Martins</u> (Signature of Owner) Bernadine Martins	<u>6651 Kawaihau Rd., Kapaa, HI 96746; TMK: (4) 4-6-007:052</u> (Address / Interest in Dam or Reservoir)
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Date: _____

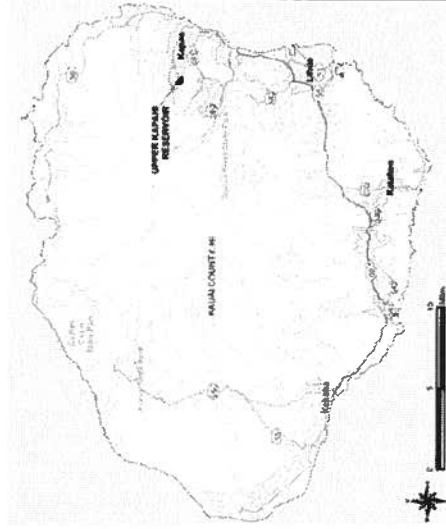
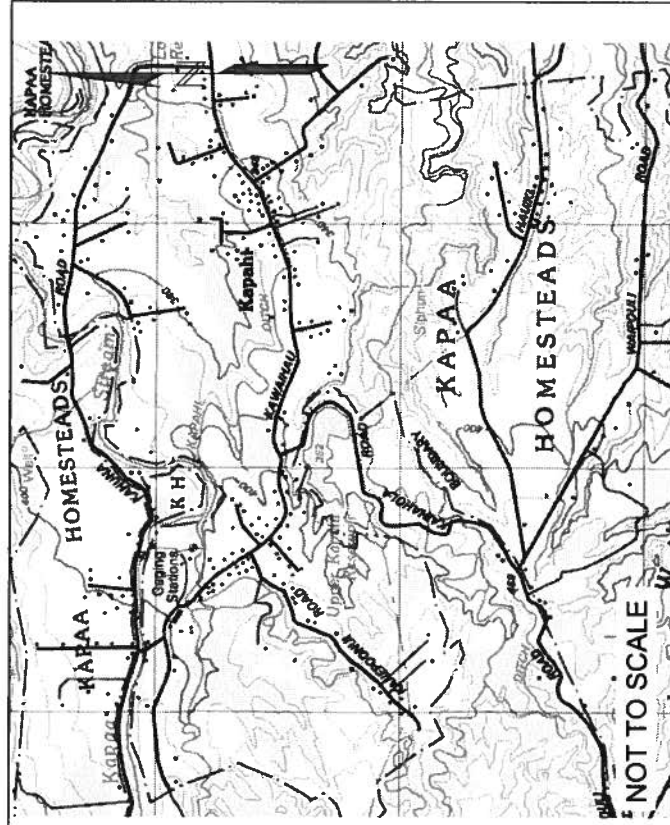
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<u>Erika Martins</u> (Signature of Owner) Erika/Christopher Martins	<u>P. O. Box 40; Kapaa, HI 96746; TMK: (4) 4-6-007:029</u> (Address / Interest in Dam or Reservoir)
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Date: _____

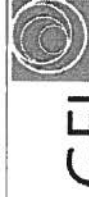


Source:

USGS 1:24000 Topographic Maps

DLNR Dams & Reservoirs on Kaua'i
Kaua'i, Hawaii

State of Hawaii
Department of Accounting & General Services



UPPER KAPAHE RESERVOIR
(HI-00013)
SITE LOCATION

Project 092490

June 2010

Figure 2.1

Exhibit 2

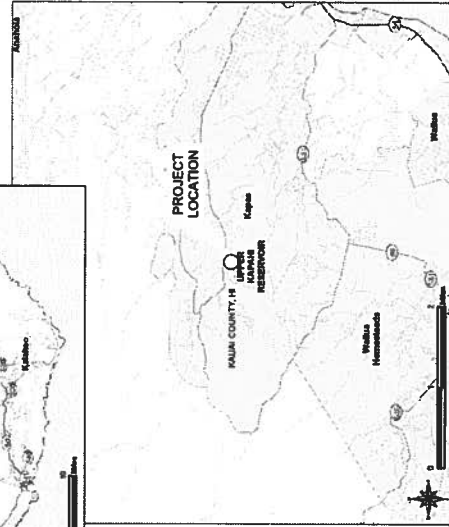
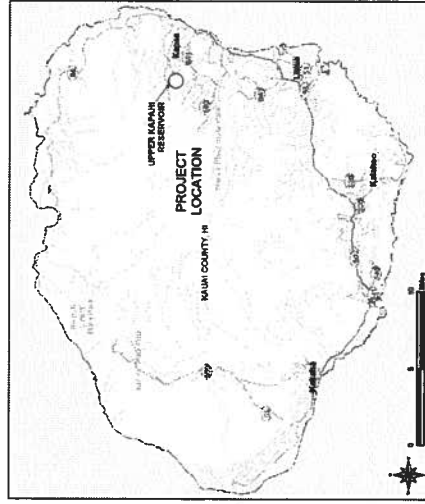
**DLNR DAMS & RESERVOIRS ON KAUA'I
MAINTENANCE AND REMEDIATION IMPROVEMENTS
UPPER KAPAHU RESERVOIR (NID HI-00013)**

TMK: (4) 4-6-007: 011



GEI CONSULTANTS, INC.
10860 GOLD CENTER DRIVE, SUITE 350
RANCHO CORDOVA, CALIFORNIA 95670

APPROVED



SHEET No.	DWG. No.	DRAWING TITLE
1	G-01	TITLE SHEET, DRAWING INDEX, LOCATION MAPS, AND APPROVALS
2	G-02	SYMBOLS AND ABBREVIATIONS
3	C-01	EXISTING SITE PLAN AND SURVEY CONTROL
4	C-02	SITE PLAN
5	C-03	VEGETATION CLEARING PLAN
6	C-04	EROSION CONTROL PLAN
7	C-05	ROADWAY CONTROL DETAILS
8	C-1-01	EMBANKMENT - SOUTH PLAN OF MODIFICATIONS
9	C-1-02	EMBANKMENT - NORTH PLAN OF MODIFICATIONS
10	C-1-03	EMBANKMENT MODIFICATIONS - SECTIONS
11	C-1-04	ROCK SLOPE PROTECTION - SECTIONS AND DETAILS
12	C-1-05	EMBANKMENT MODIFICATIONS - SECTIONS
13	C-1-06	EMBANKMENT MODIFICATIONS - SECTIONS
14	C-1-07	EMBANKMENT - GRADING LIMIT SURVEY LAYOUT PLAN
15	C2-01	BOX CULVERT SPILLWAY - LAYOUT PLAN
16	C2-02	BOX CULVERT SPILLWAY - EXCAVATION PLAN AND PROFILE
17	C2-03	BOX CULVERT SPILLWAY - PLAN, ELEVATION, AND SECTIONS
18	C2-04	BOX CULVERT SPILLWAY - ROADWAY REPLACEMENT
19	S-01	STRUCTURAL - GENERAL NOTES
20	S-1-01	BOX CULVERT SPILLWAY - CONCRETE REINFORCEMENT SECTIONS
21	S-1-02	BOX CULVERT SPILLWAY - CONCRETE REINFORCEMENT DETAILS

CHAMPAGNE, LAND AND NATURAL RESOURCES STATE OF HAWAII	DATE
COMPTROLLER DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES STATE OF HAWAII	DATE
PUBLIC WORKS ADMINISTRATION DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES	DATE

RECEIVED BY	DATE	INITIALS	REMARKS
			<div style="text-align: center;"> </div>

DEPT. OF ACCOUNTS & GENERAL SERVICES
DIVISION OF PUBLIC WORKS

DATE FILE #

AMOUNT

STATE OF NEW YORK

DUNR DAMS & RESERVOIRS ON KAUAI
UPPER KAPAHU RESERVOIR
KAUAI, HAWAII

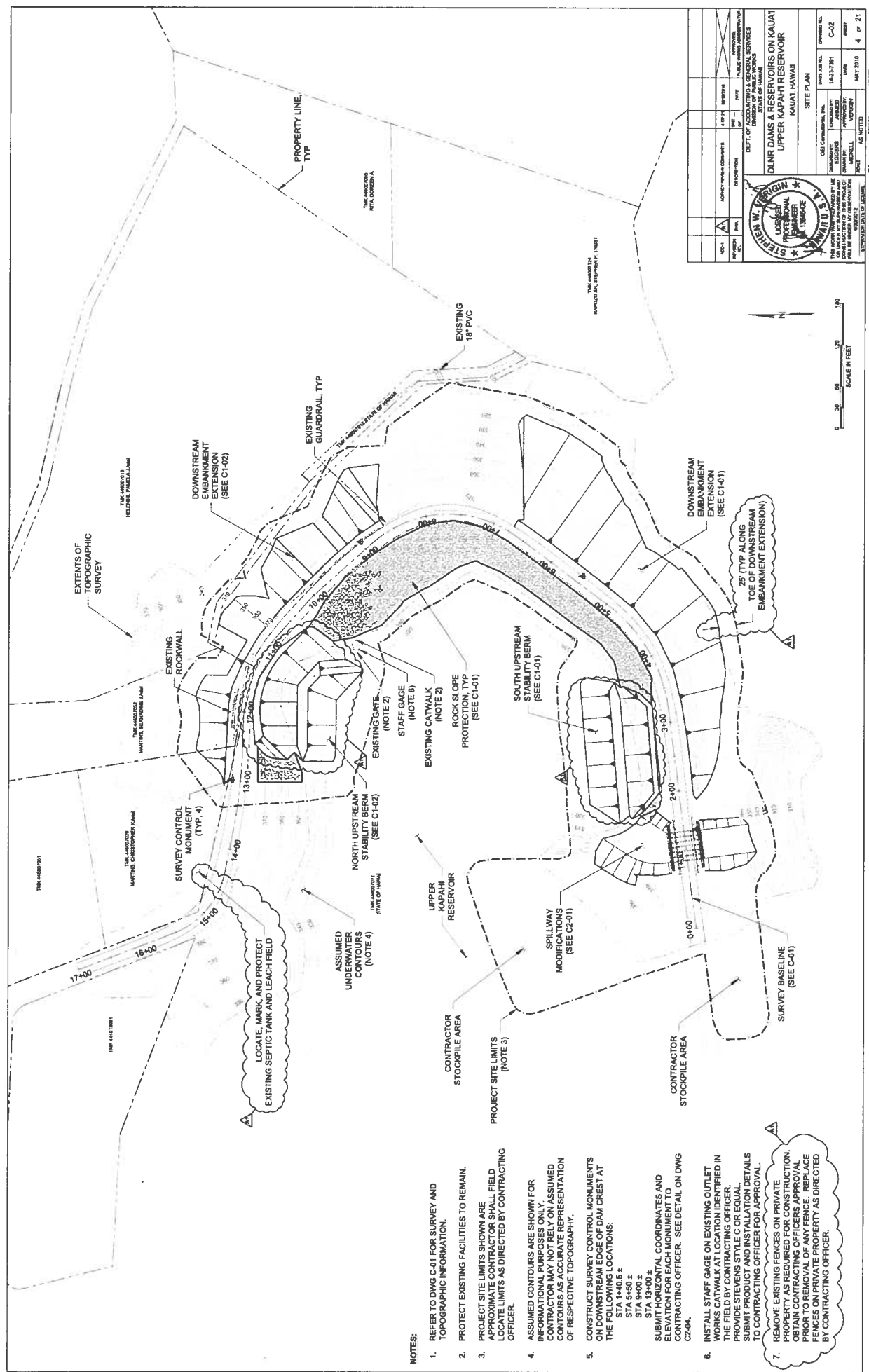
TITLE SHEET, DRAWING INDEX,
LOCATION MAPS, AND APPROVALS

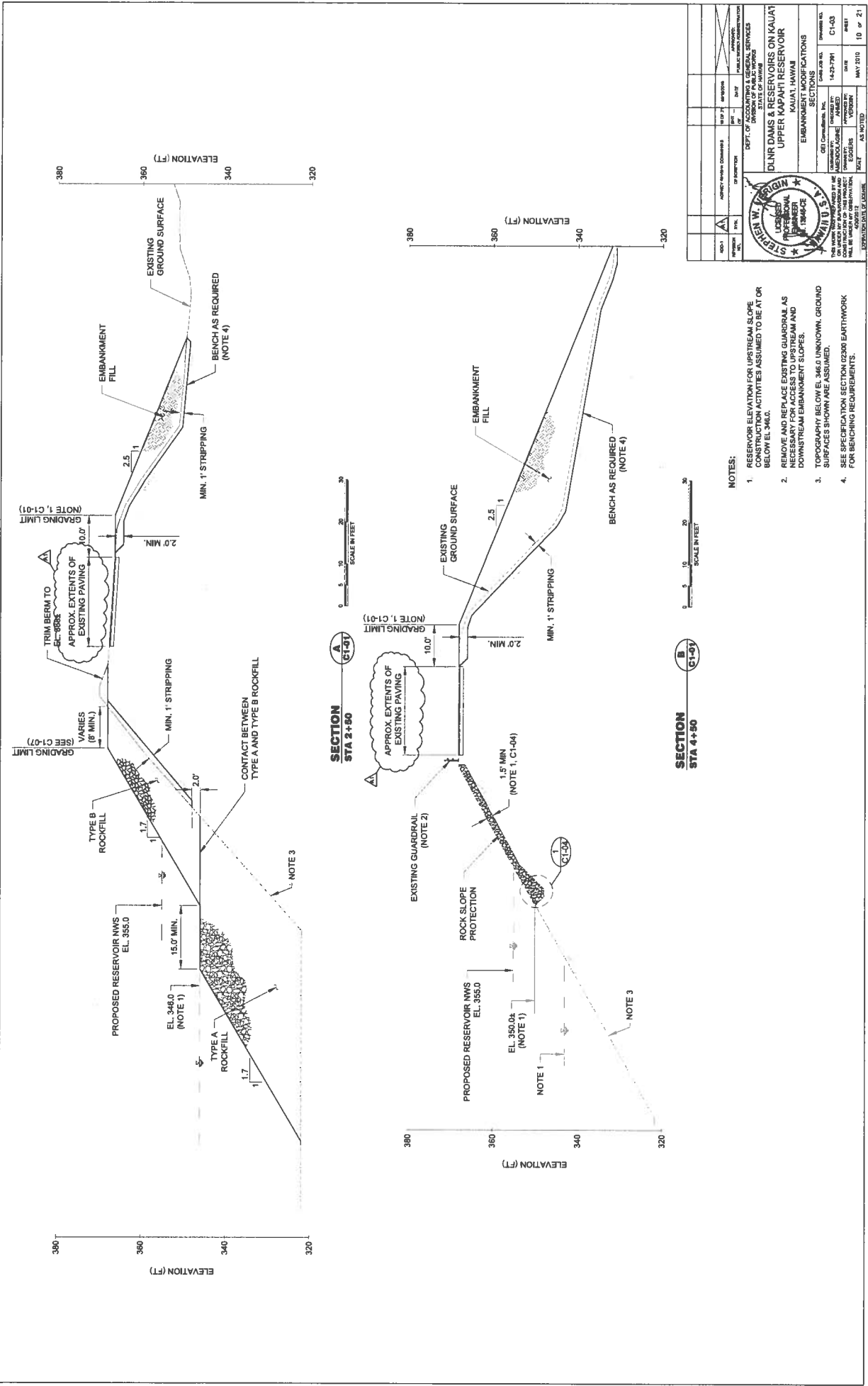
GEI Consultants, Inc.
1425-781
ANAHEIM

DATE MAY 20 1964
BY JAS. MOTTED
FOR HAWAII

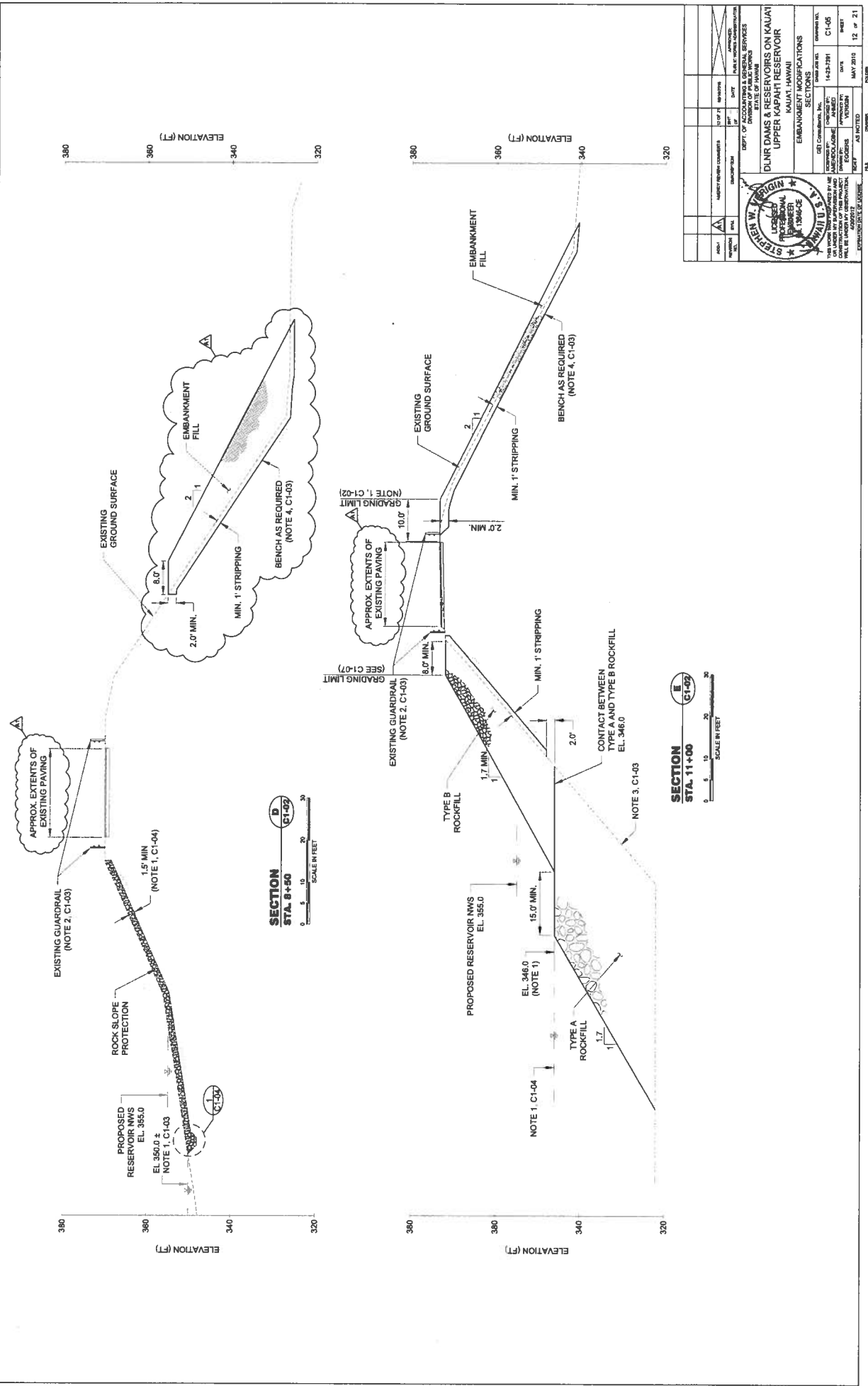
THIS PROJECT WAS APPROVED BY THE
 DIVISION OF PUBLIC WORKS, STATE OF NEW YORK
 ON THE BASIS OF THIS PROJECT'S
 COMPLIANCE WITH THE
 FEDERAL AID ROAD ACT OF 1956
 AND THE
 FEDERAL AID ROAD ACT OF 1962

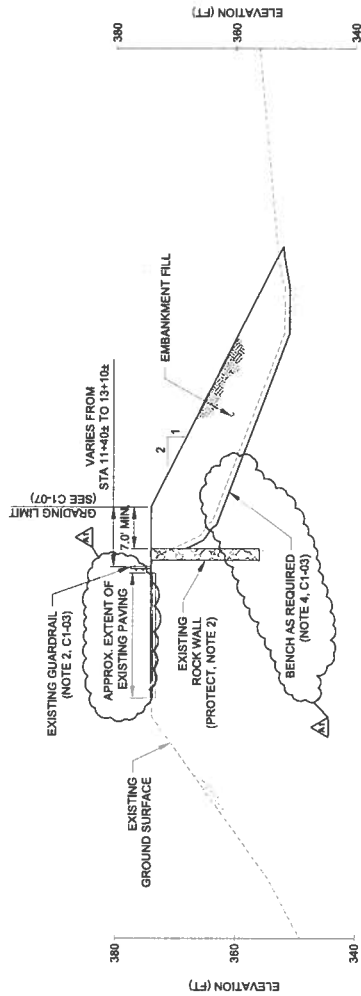
Exhibit 3



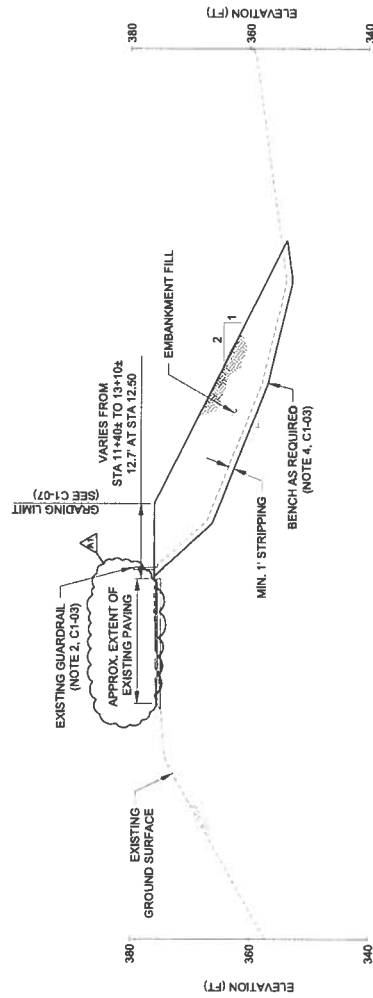


PROJECT NO.	14-03	DATE	MAY 2010
PROJECT NAME	DLNR DAMS & RESERVOIRS ON KAUAI		
PROJECT LOCATION	UPPER KAPAHU RESERVOIR		
PROJECT DESCRIPTION	EMBAKMENT MODIFICATIONS		
DESIGNER	DEPT. OF ACCOUNTING & GENERAL SERVICES		
DESIGNER'S ADDRESS	14-03-791		
DESIGNER'S PHONE	808-541-1111		
DESIGNER'S FAX	808-541-1111		
DESIGNER'S E-MAIL	AS NOTED		
DESIGNER'S WEBSITE	WWW.DLNR.HAWAII.GOV		
DESIGNER'S LOGO			
DESIGNER'S SIGNATURE			
DESIGNER'S TITLE			
DESIGNER'S ORGANIZATION			
DESIGNER'S ADDRESS			
DESIGNER'S PHONE			
DESIGNER'S FAX			
DESIGNER'S E-MAIL			
DESIGNER'S WEBSITE			





SECTION
STA. 12+00

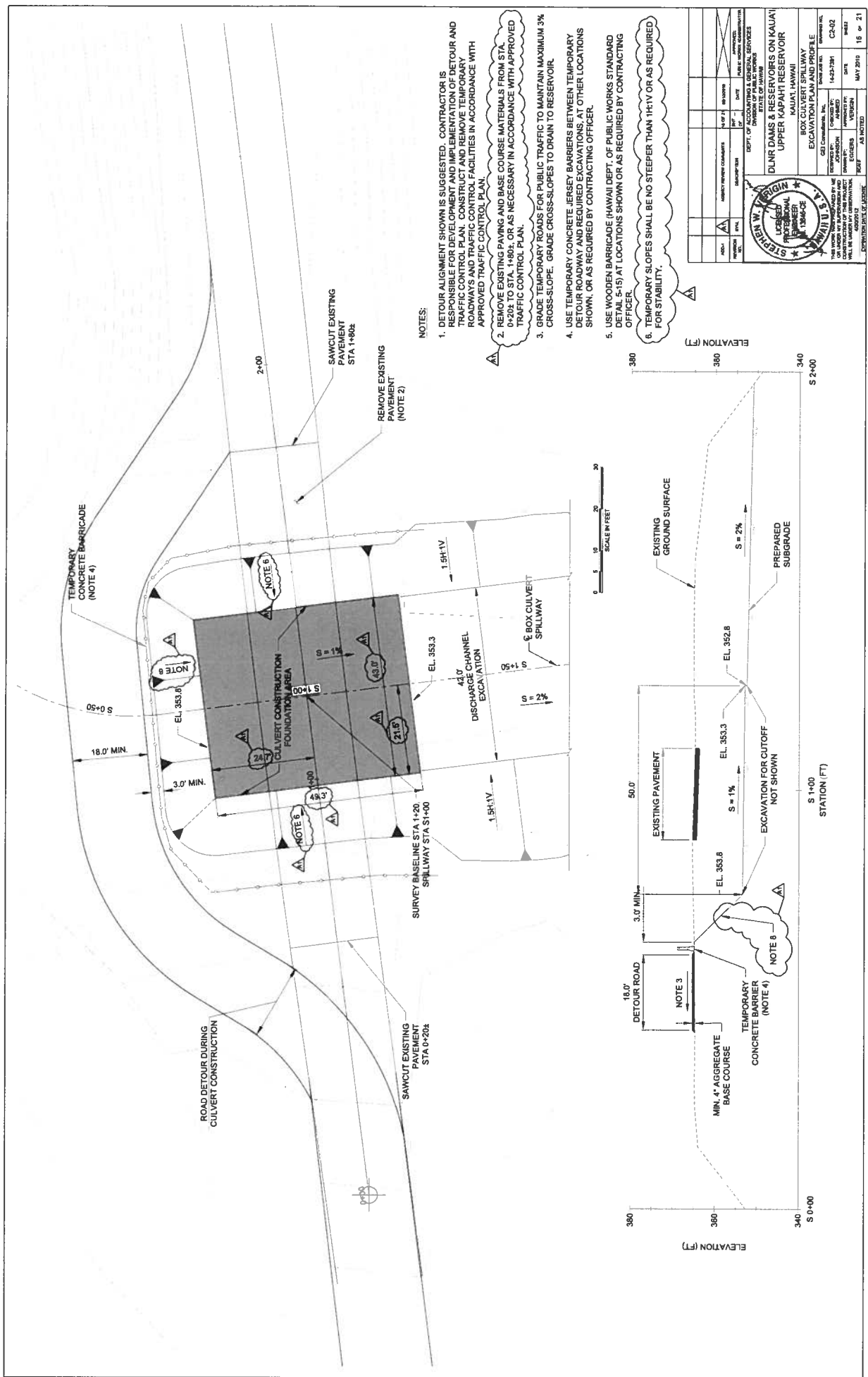


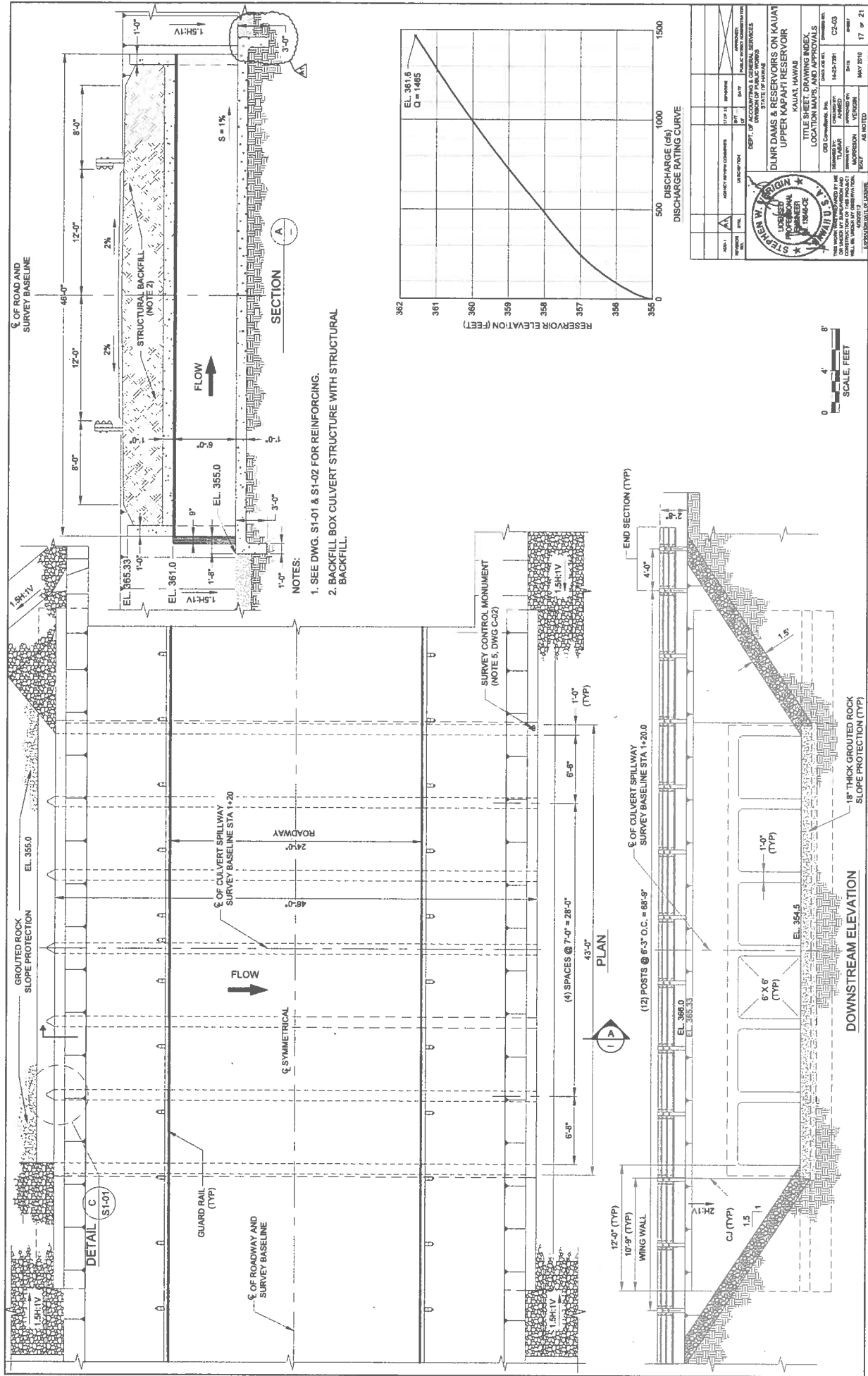
SECTION
STA. 12+50

NOTES:

1. MAINTAIN MINIMUM 7.0' FROM DOWNSTREAM FACE OF EXISTING ROCK WALL TO TOP OF SLOPE OF DOWNSTREAM EMBANKMENT EXTENSION.
2. PROVIDE TEMPORARY SUPPORT OF EXISTING ROCK WALL AS NECESSARY TO PREVENT MOVEMENT OR DAMAGE DURING EXCAVATION AND FILL PLACEMENT OPERATIONS.

[illegible]





11
AMENDED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

September 22, 2010

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Kauai

Issuance of a Right-of-Entry Permit to the Department of Accounting and General Services on State Encumbered Lands, Dams and Reservoirs on Kauai; Dam Maintenance and Remediation Improvements for Aahoaka, Hanamaulu Field 21, Wailua, Upper Kapahi and Lower Kapahi Dams and Reservoirs, in Wailua, Kapaia, and Kapahi, Kauai; Tax Map Keys: (4) 3-9-2:1, 20; 4-2-1:4, 5, 8; 4-6-7:11; 4-4-4:4; 4-6-6:7; 4-6-32:22

APPLICANT:

Department of Accounting and General Services (D.A.G.S.), whose business and mailing address is: 1151 Punchbowl Street; Honolulu, Hawaii 96813, on behalf of the Department of Land and Natural Resources (DLNR).

LEGAL REFERENCE:

Section 171-55, Hawaii Revised Statutes, as amended.

LOCATION:

Portions of Government lands, Dams and Reservoirs on Kauai; Dam Maintenance and Remediation Improvements for Aahoaka, Hanamaulu Field 21, Wailua, Upper Kapahi and Lower Kapahi Dams and Reservoirs, in Wailua, Kapaia, and Kapahi, Kauai; Tax Map Keys: (4) 3-9-2:1, 20; 4-2-1:4, 5, 8; 4-4-4:4; 4-6-7:11; 4-6-6:7; 4-6-32:22, as shown on the attached maps labeled Exhibit A.

AREA:

5,656.77 acres, more or less

ZONING:

State Land Use District: Agriculture
County of Kauai CZO: Agriculture / Open

Exhibit 4

TRUST LAND STATUS:

Section 5(B) lands of the Hawaii Admission Act

As Amended
APPROVED BY THE BOARD OF
LAND AND NATURAL RESOURCES
AT ITS MEETING HELD ON

September 22, 2010

D-1

DHHL 30% entitlement lands pursuant to the Hawaii State Constitution:

YES X NO

CURRENT USE STATUS:

Tax Map Key	Document	Tenant	Purpose
3-9-02:1; 02:20	GEO 4328*	Agribusiness Development Corp.	Agriculture and related purposes
4-2 and 4-6	RP 7310	East Kauai Water Users Cooperative ("EKWUC")	Operation, repair and maintenance of irrigation water diversions and transportation infrastructure system including the right to divert, store, take, draw off, conduct away and dispose thereof government owned water from streams and rivers in the drainage area for irrigation purposes.
4-2-1:4	GEO 1389	DOFAW	Public hunting ground & upland game bird reserve
4-2-1; 4-4-4	GL 3911	KIUC	Electrical transmission lines
4-2-1:8	RP 5567	UH College of Tropical Ag	Agricultural experimental purposes
4-4-4:4	GL 5660**	Sanchez, William & Alison	Pasture purposes
4-6-6:7			
4-6-32:22	LOD 28120	Rodrigues, Gary & John	Access & utility easement

*Pending transfer of Revocable Permits to Agribusiness Development Corporation pursuant to Board approval on April 25, 2008, agenda item D-1.

**GL 5660 covers multiple parcels.

CHARACTER OF USE:

Capital Improvement purposes.

TERM OF RIGHT-OF-ENTRY:

Two (2) years.

CONSIDERATION:

Gratis.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

In accordance with the Division of Land Management's Environmental Impact Statement Exemption List, approved by the Environmental Council and dated April 28, 1986, the subject requests are exempt from the preparation of an environmental assessment pursuant to Exemption Class No. 1 and Exemption Class No. 9. Also, in accordance with Hawaii Administrative Rules, Section 11-200-8(a), the subject request is considered to be exempt from the preparation of an environmental assessment pursuant to Exemption Class No. 1. See Exhibit B.

DCCA VERIFICATION:

Government agency; not applicable.

APPLICANT REQUIREMENTS:

Applicant shall be required to:

- 1) Obtain written concurrence from tenants prior to any activity on the subject lands.

REMARKS:

Act 213, SLH 2007, Item K-6, as amended by Act 158, SLH 2008 appropriated \$14,530,000 for the Dam Assessments, Maintenance and Remediation Improvements, Statewide, for the purpose of satisfying the State's obligations under Act 262, the "Hawaii Dam and Reservoir Safety Act of 2007".

Governor's Memorandum, dated December 18, 2008, delegated this funding to D.A.G.S. Since DLNR, through its Engineering Division's Dam Safety Program, is responsible for the inspection and regulation of all of the State's dams and reservoirs, D.A.G.S. Public Works Division was delegated the responsibility for managing the assessment, repair, alteration and/or removal of the dams and reservoirs under the Department's jurisdiction because there appeared to be the potential for a "conflict of interest" for DLNR to also be responsible for the party conducting the actual assessment and remediation of these dams and reservoirs.

Part of this \$14,530,000 funding is to remediate five (5) dams and reservoirs on Kauai: Aahoaka, Hanamaulu Field 21, Wailua, Upper Kapahi and Lower Kapahi Dams and Reservoirs. To complete the design and construction of these capital improvements, the D.A.G.S. is requesting a right-of-entry for two (2) years. See Exhibit C.

Comments were solicited from the Office of Conservation and Coastal Lands and the State Historic Preservation Division, and they had no objections.

Staff recommends gratis consideration for the issuance of the requested right-of-entry permit since the applicant is a government agency.

There are no pertinent issues or concerns.

Staff is recommending authorizing the Chairperson to extend the right-of-entry beyond the 2-year term, in the event that D.A.G.S. projects experience unanticipated delays.

RECOMMENDATION:

That the Board, subject to the Applicant fulfilling the Applicant requirements above, authorize the issuance of a right-of-entry permit to the Department of Accounting and General Services covering the subject areas under the terms and conditions cited above, which are by this reference incorporated herein and further subject to the following:

1. The standard terms and conditions of the most current right-of-entry permit form, as may be amended from time to time;
2. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State; and
3. In the event the projects experience unanticipated delays, authorize the Chairperson to extend the right-of-entry.

Respectfully Submitted,



Lydia M. Morikawa
Special Projects and Development Specialist

APPROVED FOR SUBMITTAL:



Laura H. Thielen, Chairperson

Land Board Meeting September 22, 2010; D-1

Attachments

The Land Board amended the submittal by: changing the term of the right-of-entry permit from two (2) years to one (1) year, renewable annually as needed. Otherwise, the Land Board Approved staff's recommendations as submitted.

PLAT II

PLAT 32

PLAT 33

PLAT 34

PLAT 35

PLAT 36

PLAT 37

PLAT 38

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PLAT 40

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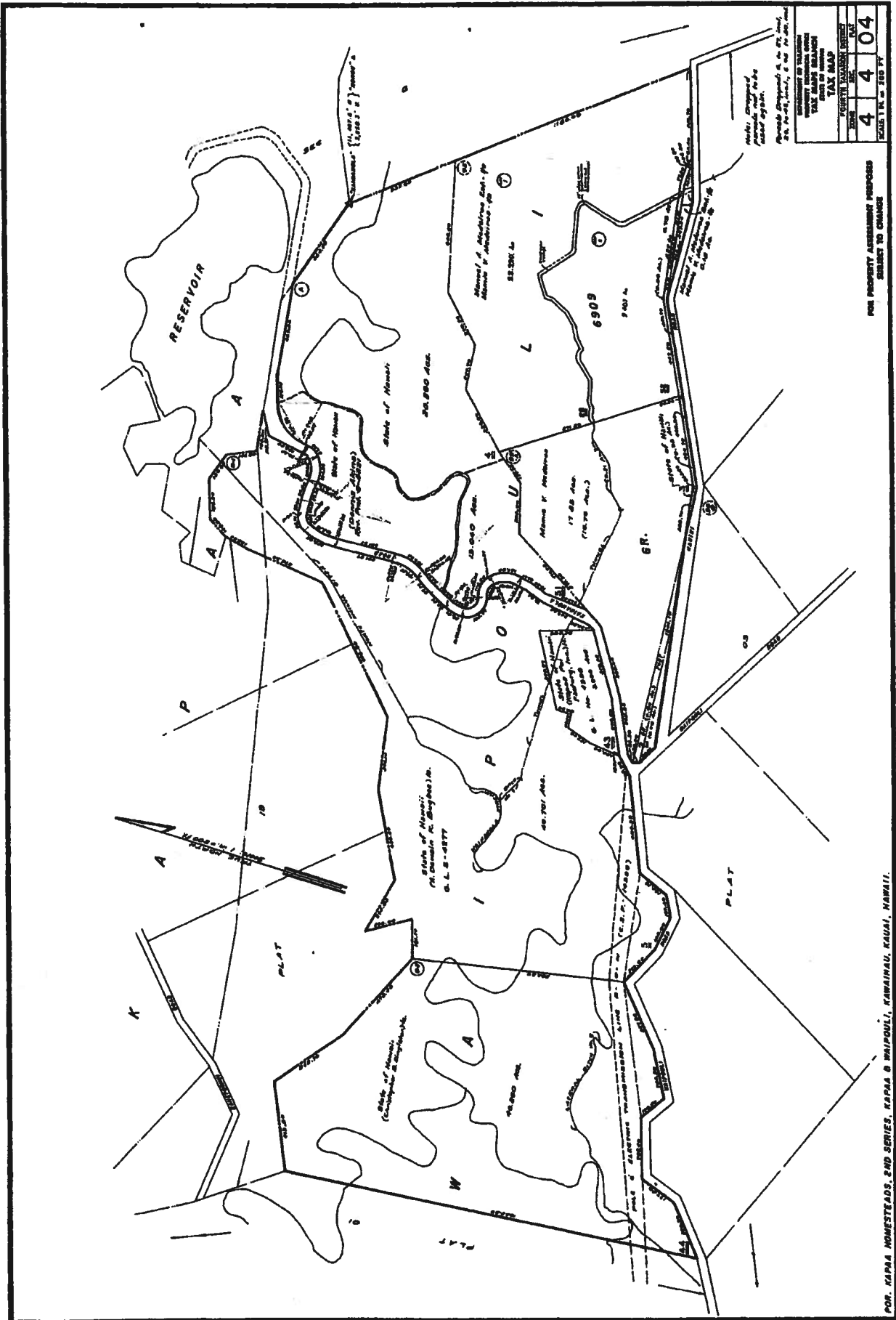
PLAT 314

PLAT 315

PLAT 316

PLAT 317

PLAT 318



Upper Kapahi

FOR PROPERTY ASSESSMENT PURPOSES
SUBJECT TO CHANGE

POR. KAPAHĪ HOMESTEADS, 2ND SERIES, KAPAHĪ & WAIPOULI, KĀHĀLĀU, KAUAI, HAWAII.

EXHIBIT "A"

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSIONER OF WATER RESOURCES, HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 3, 2010

EXEMPTION NOTIFICATION

regarding the preparation of an environmental assessment pursuant to Chapter 343, HRS and Chapter 11-200, HAR

Project Title: DLNR Dams and Reservoirs on Kauai
Maintenance and Remediation Improvements

Project / Reference No.: D.A.G.S. Job No. 14-23-7391

Project Location: Upper Kapahi Reservoir (State ID #KA-0013)
Kapahi, Kauai County, Hawaii
TMK No.: (4) 4-6-007:011

Project Description: Design and repair of the deficiencies of this reservoir –
upstream / downstream slope stabilization, improvements to
the spillway, vegetation clearing on the upstream slope, crest
and downstream slope of the dam – to insure public safety.

Chapter 343 Trigger(s): Use of State funds and on State lands

Exemption Class No. and Description: 1

In accordance with the Division of Land Management's Environmental Impact Statement Exemption List, approved by the Environmental Council and dated April 28, 1986, the subject project is considered to be exempt from the preparation of an environmental assessment pursuant to Exemption Class No. 1, that states: "Operations, repairs or maintenance of existing structures, facilities, equipment or topographical features, involving negligible or no expansion or change of use beyond that previously existing."

The maintenance and improvement project consists of vegetation clearing on the upstream slope, crest, and downstream slope of the dam, stabilizing the upstream slope

EXHIBIT "B"

with rock-filled buttresses, and furnishing and placing rock slope protection, adding earthen extension on the downstream slope for stabilization and future on-going maintenance, and excavating and constructing a new box culvert spillway structure to meet standard dam safety requirements. A portion of the roadway on the dam crest that will be removed for the construction of the box culvert spillway will be replaced, as well as the guardrails on the dam crest.

The maintenance and improvement project is a single action and not a component or incremental action of a larger total undertaking. There is no cumulative impact as this project will serve to ensure that the Dam will continue to function safely as it has been historically, and it will also be in compliance with the Hawaii Dam Safety Act of 2007. Upon repair, the Dam will serve to maintain a safe environment and simultaneously continue to provide an effective water supply.

**Exempt Item and Description
from Agency Exemption List:**

5

Routine and emergency repair and restoration of existing structures and facilities on State lands involving negligible or no expansion or change or use beyond that previously existing.

Recommendation:

It is recommended that the Board find that this request will probably have minimal or no significant effect on the environment and is presumed to be exempt from the preparation of an environmental assessment.

Laura H. Thielen, Chairperson

Date

DAM SAFETY PERMIT GENERAL CONDITIONS

APPROVAL OF PLANS AND SPECIFICATIONS FOR DAM AND RESERVOIR CONSTRUCTION, ENLARGEMENT, REPAIR, ALTERATION OR REMOVAL

The following General Conditions shall be adhered to for all Dam Safety permits unless otherwise authorized in writing.

1. Actual construction, enlargement, repair, alteration or removal shall be completed within 5 years of issuance of the permit application approval unless an extension authorized in writing by the Board is issued.
2. Prior to the start of work the owner or applicant shall provide a construction engineer to ensure compliance with the approved plans and specifications and who shall have ultimate responsibility for the supervision of all inspection tasks. The construction engineer may assign some inspection tasks to a duly authorized agent under the construction engineer's supervision. The engineer shall be licensed in the State of Hawaii.
3. The construction engineer shall maintain a record of construction that at a minimum, shall include, daily activity, and progress reports, all test results pertaining to construction; photographs sufficient to provide a record of foundation conditions and various stages of the construction through completion, all geologic information obtained; and construction problems and remedies.
4. A construction quality assurance plan shall be prepared and submitted to the Department for approval prior to the start of construction, which details the minimum requirements of the construction engineer's observation of construction.
5. A construction schedule, which includes the notice to proceed date and estimated project duration and a construction emergency action plan shall be submitted prior to the preconstruction meeting.
6. A preconstruction meeting shall be held subsequent to submitting the quality assurance plan, construction schedule and construction emergency action plan, but not later than 14 days prior to the start of construction. All parties actively involved in the construction should be requested to attend, such as the dam owner, the design engineer, the construction engineer, the contractor and the Department.
7. The Department shall be notified 5 calendar days prior to the commencement of construction.
8. Any changes from the approved plans and specifications shall be approved by the design engineer and a change order, including details and supporting calculations, must be provided to the Department. Major changes must be submitted in writing with supporting documentation and approved in writing by the Department. No work shall be initiated until the approval by the Department or Board is received. Minor changes may be transmitted verbally and approved by the Department verbally provided that documentation of the change is provided to the Department within 10 days of the approval.

9. For new dam construction and for dams and reservoirs that have lowered the water level or have been drained to facilitate construction, the construction engineer shall file and obtain approval of a filling plan with the Department. The applicant/owner shall not proceed with the filling of the reservoir until it receives permission from the Department. The construction engineer shall provide documentation of monitoring during the filling operation.
10. Prior to the filling of the reservoir, the construction engineer shall submit one copy each of the approved Operations Manual and the approved Emergency Action Plan for the facility upon completion of the project as applicable.
11. The construction engineer shall give the Department at least ten days advanced notice of initial materials placement of the dam's foundation, in the cutoff trench, outlet backfill, outlet foundation, and any appurtenance requested by the Department in the approval of the plan for construction observation, to allow for observation by the Department.
12. Notice of substantial completion shall be issued by the construction engineer to the Department stating that the permitted improvements are functionally complete such that filling of the reservoir can be initiated with an approved filling plan.
13. The construction engineer shall give the Department fifteen (15) calendar days advance written notice prior to the project's final construction inspection. The construction engineer shall coordinate with the Department to conduct this inspection in the presence of the Department's dam safety personnel.
14. The construction engineer shall provide notice at least ten (10) days prior to initiating filling the reservoir, unless agreed at the final inspection.
15. If conditions are revealed which will not permit the construction, enlargement, repair, alteration, or removal of a safe dam or reservoir, the application for approval for construction, enlargement, repair, alteration, or removal shall be revoked.
16. A topographic survey of completed work including all monuments, inverts, crest alignment, spillways, and significant appurtenant features, when required by the Department shall be completed.
17. The applicant/owner shall utilize appropriate erosion control best management practice measures during construction to minimize turbidity (such as scheduling of work during period of low stream flow) and prevent debris and construction materials, including concrete, petroleum products, and other pollutants from enter the waters of the State. Construction related water and debris should be properly disposed of in a legal and environmentally safe manner and in accordance with the Department of Health and other Federal regulations.
18. The applicant/owner shall submit a copy of the dam safety application and the plans and specifications of the proposed improvements to the County Engineer of the County for which the dam resides for compliance with County codes.
19. Within fifteen (15) calendar days of completing the project, the applicant/owner or its representative shall provide the Department with a confirmation letter of compliance, signed and stamped by the construction engineer, indicating that the construction

was completed in accordance to approved plans and specifications including any field changes. The construction engineer shall submit the remaining construction completion documents which may include, but not be limited to, as-constructed drawing, final construction report, topographic survey, record of the location of permanent monuments, log of recorded water levels and other readings from the refilling operation, long-term instrumentation monitoring plan, and affidavit showing the actual cost of construction including engineering costs, within 60 calendar days of the submittal of the final construction inspection.

20. Construction completion documents and the construction engineer's certification shall be provided to the Department within 60 days of the final construction inspection. The Department will review the submitted items and furnish acceptance or denial within 60 days of receipt of satisfactorily completed construction completion documents and close out the dam safety permit.
21. This permit does not relieve the applicant/owner of their obligations to comply with all applicable Federal, State, and County regulations.